

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2004/001683

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 E01F 15/00**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC E01C, E01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
KP, JP, US : IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 52 - 34131 A (Ilsan Motors) 10 MARCH 1977 See the whole document	1 - 5
Y	KP 20 - 201595 (Kim Ik Bae, Jeong Bok Gil) 21 AUGUST 2000 See the whole document	1 - 5
A	JP 09 - 302631 A (HOWA KK) 25 NOVEMBER 1997 See the whole document	1 - 5
A	KP 20 - 2000 - 12194 A (Park Jeong Uk) 5 JULY 2000 See the whole document	1 - 5
A	US 4221498 A (Astro Optics Corporation) 9 SEPTEMBER 1980 See the whole document	1 - 5

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

26 OCTOBER 2004 (26.10.2004)

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28 OCTOBER 2004 (28.10.2004)

Name and mailing address of the ISA/KR



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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

PCT/KR2004/001683

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 52 - 34131 A	10-03-77	None	
KP 20 - 201595	21-08-2000	None	
JP 09 - 302631 A	25-11-97	None	
KP 20 - 2000 - 12194 A	05-07-2000	None	
US 4221498 A	09-09-80	None	